Electronic Version
Stylesheet Version v1.1.1

[A Command Multiplier for Built-In-Self-Test]

Abstract

Disclosed is a flexible command multiplication scheme for the built-in-self test (BIST) of a high-speed embedded memory array that segments BIST functionality into remote lower-speed executable instructions and local higher-speed executable instructions. A stand-alone BIST logic controller operates at a lower frequency and communicates with a command multiplier using a low-speed BIST instruction seed set. The command multiplier uses offset or directive registers to drive a logic unit or ALU to generate "n" sets of CAD information which are then time-multiplexed to the embedded memory at a speed "n" times faster than the BIST operating speed.